

Applicants respectfully request reconsideration of the species election for the above-identified patent application in view of the foregoing amendment and following remarks. Claim 28 was amended to correct a spelling error. Claim 10 was amended to add proper antecedent basis and remove a species that fell outside of claim 1. No new matter was added. Entry of the foregoing amendment is respectfully requested. Claims 1-35 are pending.

35 U.S.C. §101 Rejection

Claims 1-35 were provisionally rejected under 35 U.S.C. §101 as claiming the same invention as co-pending USSN 09/234,019. Applicants acknowledge this provisional rejection and will be allow no overlapping subject matter to issue. However, in view of the species election, applicants will be prosecuting with two patent applications unless and until the subject matter can get examined together in one patent application and applicants prefer that it be the present later-filed patent application USSN 09/299,068.

35 U.S.C. §103 Rejections

Claims 1-19 were rejected under 35 U.S.C. §103(a) as unpatentable over Urushibata et al. (U.S. Patent 5,304,316) in view of Funahashi (U.S. Patent 4,696,869) and Linderman (U.S. Patent 3,322,703). The Examiner contends that Urushibata discloses reacting a "mixture of (A) alkylene oxide ester and (B) an incomplete ester of a polyhydric alcohol reacted with an alkylene oxide and a fatty acid with a dicarboxylic acid or an anhydride thereof." Somehow, the Examiner alleges that the foregoing components in Urushibata are the "same components designed first moiety, second moiety and third moiety of the instant claims." The Examiner contends that the differences are the temperature range in the esterification reaction and the catalyst. Therefore, the Examiner shifts the burden to applicants to show differences. Applicants respectfully traverse this rejection because the reaction conditions are essential process features that distinguish the product-by-process claim. Moreover, the primary reference does not suggest (alone or together with the secondary references) the process as claimed.

The claimed invention, in its broadest embodiment, relates to a product produced by the two-step process. Urushibata et al. does not describe the first moiety nor the first reaction conditions nor the second moiety (see abstract). Therefore, applicants can only show differences of different reactants under different process conditions yield different products. Applicants have not conducted the process of Urushibata and therefore cannot show differences based upon data because they are so different. Therefore, neither Urushibata nor either secondary reference shows the first reaction conditions and does not show the first reaction reactants.

With regard to the temperature ranges of esterification, it should be noted that they are non-overlapping. Obviousness is hard to believe when the claimed range is much hotter than that

disclosed in Urshibata. Moreover, the claimed invention in claim 1 (broadest embodiment) does not form the intermediate used in the Urshibata esterification reaction (the claimed second step). Therefore, the second reaction step is not taught in Urshibata.

With regard to the secondary references, applicants do not understand how the magnetic recording medium of Funahashi et al. is applied except that there is an esterification reaction. Moreover, Lindermann seems to show another esterification reaction in the preparation of an adhesive material. Therefore, both secondary references show esterification but neither secondary reference, nor Urshibata discloses nor suggests a combination of such reaction conditions to form the inventive anti-wear compound. Therefore, the combination of references does not piece together the claimed invention, even if they could be combined. Withdrawal of this rejection is respectfully requested.

Claims 20-35 were rejected under 35 U.S.C. §103 as unpatentable over Urshibata in view of Funabashi and Lindermann as above and further in view of Zehler. According to the Examiner, Zehler adds a lubricant composition and points to several passages in the patent. The Examiner further states "for the usually percentage of the convention additives, note column 13 lines 40-48 rendering the claimed percentage of the conventional additives obvious." Applicants respectfully traverse this rejection for the reasons stated above for claims 1-19 with respect to the claimed anti-wear compound and because Zehler does not disclose or suggest the other components claimed in the claim 20 anti-wear supplement composition.

Claim 20 defines an anti-wear supplement composition that adds the claimed anti-wear compound to a lubricant formulation in the form of a lubricant supplement. The components of the composition are spelled out in claim 20 according to ranges. As noted throughout the specification, the advantage of the claimed anti-wear compound is the ability to significantly lower the need for phosphorous-based anti-wear agents. That is the basis behind the formulation in claim 20. Zehler does not disclose a similar formulation with or without the inventive anti-wear compound. The Examiner pointed to the formulation in Example 5 on column 13. No phosphorous agent is present there, unless it is part of an unspecified "Commercial Universal Additive Package." As far as applicants can tell, Zehler is irrelevant and not remotely close to the claimed invention. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1-8 and 11-35 were rejected under 35 U.S.C. §103 as unpatentable over three Hayahai patents ('194, '955 and '573). The Examiner has alleged that various noted sections "disclose and teach reaction additives, process for producing said additives, [and] reaction additive supplemental composition lubricant composition comprising said additive. Applicants respectfully traverse this rejection and note that none of the three patents disclose or suggest the

claimed (product-by-process) anti-wear compound rendering moot the issues of additive package and lubricant composition.

The Hayahai patents all relate to "olefin polymer substituted carboxylic acid acylating agents." The first moiety in Hayahai is not the first moiety in the present invention because there is no carboxylic acid group in the first moiety. Hayahai does not disclose the second moiety reacted (under claimed reaction conditions) with the first moiety. Hayahai does not disclose esterification with the third polyol moiety. Therefore, other than providing many pages of unrelated detailed chemistry of a different reaction with different reactants, applicants do not understand where Hayahai discloses or suggests the claimed anti-wear compound. In looking at the claimed product-by-process, one has to compare reactants and processes. Neither reactant comparisons nor process step comparisons makes sense in the three Hayahai references. Withdrawal of this rejection is respectfully requested.

Claims 1-6, 11-16 and 20-24 were rejected as unpatentable over LeSuer. The Examiner makes the same comments with respect to LeSuer as made with Hayahai with a bunch of reference citations. Applicants traverse this rejection because LeSuer is irrelevant to the claimed invention and does not disclose or suggest the claimed anti-wear compound.

In its broadest embodiment in column 1, LeSuer discloses a "composition" (*i.e.*, mixture of compounds) of a hydroxylamine (having the formula shown) and a "hydrocarbon-soluble carboxylic dispersant." Neither element of the LeSuer composition is the claimed anti-wear compound characterized by the process. The dispersant elements are further described in Table 1 and the Examiner notes several Table 1 entries. None of the dispersants in Table 1 disclose or suggest the anti-wear compound in claim 1 because none describe the two step reaction using the three moieties. Therefore, if the Examiner is alleging that the LeSuer dispersants disclose or suggest the claimed anti-wear compound, there is a big gap in the chemistry, including different reactants and a missing second reaction. Accordingly, LeSuer does not disclose or suggest the claimed anti-wear compounds. The remaining claims are similarly patentable over LeSuer in view of the lack of disclosure of their additional formulation elements. Withdrawal of this rejection is respectfully requested.

Although out of order, the logical next rejection to address is the rejection of claims 1-6 and 11-16 as anticipated under 35 U.S.C. §102 over LeSuer. The Examiner points to Table 1 of LeSuer as disclosing the claimed compounds. Applicants respectfully traverse this rejection for the reasons stated above with regard to Table 1 of LeSuer.

The claimed product-by-process is the result of a two step reaction. Table 1 discloses a one step reaction. There are specific reaction moieties in the claimed invention. Table 1 in

LeSuer does not disclose any of the required moieties. Therefore, the disclosure in LeSuer does not come close to anticipating the claimed invention. Withdrawal of this rejection is respectfully requested.

Backing up, claims 1-9 and 11-27 were rejected under 35 U.S.C. §102 as anticipated by or under 35 U.S.C. §103 as obvious over Baillargen. The Examiner appears to use the structure of the claimed invention and then look for similar words in Baillargen. Applicants traverse this rejection because the one step reaction disclosed in B is not the same as the two-step claimed product-by-process.

The broadest embodiment of Baillargen can best be seen in column 2 lines 13-60 (one of the few parts of Baillargen not referenced by the Examiner). There "core" and "pendent group" are defined and summarized as "reaction products obtained by combining the core structure and the pendent group(s) in different ratios using standard techniques for esterification/amidification." Cores are described as "two or more reactive carboxyl groups." "Suitable pendent groups are alcohols and amines with some combination of linear hydrocarbyl groups attached." Therefore, translating the language of the Baillargen reference, the first moiety is not disclosed or suggested, the first reaction is not disclosed or suggested and the second reaction is missing the product of the first reaction (with alcohols being a "core" in Baillargen and a third moiety (if a polyol) in the claimed invention). In summary, comparing the Baillargen product-by-process with the inventive product-by-process does not yield very much overlap as the inventive first step is missing and the product of the first step (not surprisingly) is not disclosed or suggested in the one step disclosed in Baillargen. Therefore, Baillargen does not disclose all of the elements of claim 1 and does not anticipate the present invention. Moreover, Baillargen does not suggest those missing elements such that Baillargen does not render unpatentable the claimed invention. Withdrawal of this rejection is respectfully requested.

Informality

The misspelling in claim 28 was corrected in the foregoing amendment.

35 U.S.C. §112 Rejections

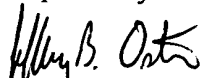
Claim 10 was rejected under 35 U.S.C. §112 first paragraph as having a phrase in lines 3-5 "not described in the specification." Applicants traverse this rejection for two reasons.

The first reason is that the claims constitute part of the specification filed and so the phrase must be found in the specification. In addition, applicants found the phrase at the bottom of page 3 (using the Word document "find" feature). Therefore, this rejection should be withdrawn.

Claim 10 was rejected under 35 U.S.C. §112 second paragraph for two reasons stated on the bottom of page 9 of the Office Action. Claim 10 was amended to address both components of this rejection. Therefore, the amendment to claim 10 obviates this rejection.

In summary, applicants respectfully request of the above-identified patent application and completion of the examination to all remaining species.

Respectfully submitted,



Jeffrey B. Oster
Attorney for Applicants
Registration No. 32,585

Davis Wright Tremaine
2600 Century Square
1501 Fourth Avenue
Seattle, Washington 98101-1688
Telephone (206) 628 7711
Facsimile (206) 628 7699